

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | • |
|--|----------------|----------------------|-------------------------|------------------|---|
| 10/009,600 | 12/10/2001 | John Bolland Reast | 02004.053 | 4226 | |
| 75 | 590 10/22/2003 | | EXAM | EXAMINER | |
| Fildes & Outland | | | SPISICH, GEORGE D | | |
| 20916 Mack Avenue Suite 2 Grosse Pointe Woods, MI 48236 | | | ART UNIT | PAPER NUMBER | - |
| | | | 3616 | | |
| | | | DATE MAILED: 10/22/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | \leq W | | | | |
|---|------------------------|--|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| | 10/009,600 | REAST, JOHN BOLLAND | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | George D. Spisich | 3616 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| 2a)☐ This action is FINAL . 2b)⊠ Thi | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowa | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-8</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-8</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>10 December 2001</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | • , , | , , | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| · · · | : have been received | | | | | |
| 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informa | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) | | | | |

Application/Control Number: 10/009,600 Page 2

Art Unit: 3616

DETAILED ACTION

Election/Restrictions

Applicant's election of Species A in Figures 3A-4B and 8 in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the

supposed errors in the restriction requirement, the election has been treated as an

election without traverse (MPEP § 818.03(a)).

Drawings

Figure 1A, 1B, 1C, 2A and 2B should be designated by a legend such as --Prior

Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed

drawing correction or corrected drawings are required in reply to the Office action to

avoid abandonment of the application. The objection to the drawings will not be held in

abeyance.

Application/Control Number: 10/009,600

Art Unit: 3616

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Also, in claim 1, line 5, "a pair of leaf spring arms" should be - - said leaf spring suspension arms - - to relate this element to the earlier claimed leaf spring suspension arms.

In claim 7 is unclear. As claimed, the arrangement allows for the opposite rotation of the pivot points. This is incorrect. The pivot points are stationary and not considered to rotate, only the arms (and the anti- roll means) rotate. The suspension is arranged to allow for the opposite rotation of the suspension arms at their respective pivot points.

Page 3

Art Unit: 3616

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stuart (USPN 5,678,845).

Stuart discloses an air suspension anti-roll stabilization system comprising at least one pair of air bags (33) (only the air bag on the left side is shown, but inherently, this arrangement would be duplicated on the other side of the vehicle), mounted upon an axle (19) via leaf spring suspension arms (21) of an associated vehicle on respective opposed sides of the longitudinal axis of the vehicle (again, inherent in the suspension arrangement), with the axle being located at least partially with respect to the frame or chassis of the vehicle by the leaf spring suspension arms which are located on respective opposed sides of the longitudinal vehicle axis and of which each has one end mounted pivotally to the vehicle frame or chassis and an anti-roll means (11) is connected rigidly between the pair of longitudinal leaf spring suspension arms. It should be noted that the leaf spring in Figure 2 of Stuart is only partially shown so as to allow for the viewing of the anti-roll means (11).

The anti-roll means (11) is connected at or adjacent the points at which the one end of each arm is pivotally attached to the frame of chassis of the associated vehicle.

Application/Control Number: 10/009,600 Page 5

Art Unit: 3616

The anti-roll means comprises an anti-roll bar or tube. This anti-roll means extends transversely of the longitudinal axis of the associated vehicle is arranged to add bending stiffness to the longitudinal suspension arms close to the pivot points during vehicle roll.

This arrangement provides for the arms to act as beams pivotally mounted at their one ends to beams which are fixed at those one ends during roll motion of the vehicle. As the roll motion is incurred, the pivoting of the leaf suspension arm ceases and therefor is considered fixed. This arrangement also "allows for" the associated pivot points to rotate in opposite directions during vehicle roll whist rotating in the same direction during normal ride. There is no feature that would disallow for the opposite movement of the pivot points so therefore, the arrangement "allows" the opposite rotational movement.

With respect to claim 8, as a portion of the anti-roll means extends longitudinally along the leaf spring suspension arms, it is considered to be located at various points along the length of the suspension arm.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/009,600

Art Unit: 3616

Page 6

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Booher (USPN 4,718,693) in view of Wilson (USPN 5,938,221).

Booher discloses an suspension anti-roll stabilization system comprising an axle (22) mounted on leaf spring suspension arms (12) of an associated vehicle on respective opposed sides of the longitudinal axis of the vehicle with the axle being located at least partially with respect to the frame or chassis of the vehicle by the leaf spring suspension arms which are located on respective opposed sides of the longitudinal vehicle axis and of which each has one end mounted pivotally to the vehicle frame or chassis and an anti-roll means (32) is connected rigidly between the pair of longitudinal leaf spring suspension arms. The anti-roll means (32) is connected at or adjacent the points at which the one end of each arm is pivotally attached to the frame of chassis of the associated vehicle. The anti-roll means comprises an anti-roll bar or tube. This anti-roll means extends transversely of the longitudinal axis of the associated vehicle is arranged to add bending stiffness to the longitudinal suspension arms close to the pivot points during vehicle roll.

This arrangement provides for the arms to act as beams pivotally mounted at their one ends to beams which are fixed at those one ends during roll motion of the vehicle. As the roll motion is incurred, the pivoting of the leaf suspension arm ceases and therefor is considered fixed. This arrangement also "allows for" the associated pivot points to rotate in opposite directions during vehicle roll whist rotating in the same direction during normal ride. There is no feature that would disallow for the opposite

Application/Control Number: 10/009,600

Art Unit: 3616

movement of the pivot points so therefore, the arrangement "allows" the opposite rotational movement.

However, Booher does not disclose at least a pair of air bags mounted upon the axle via the leaf springs.

Wilson discloses a leaf spring suspension further comprising air bags mounted on the axle via the leaf spring suspension arms to aid and improve the damping characteristics of the suspension arrangement.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the leaf spring suspension of Booher by providing at least a pair of air bags mounted to the axle via leaf springs as taught by Wilson for improving the damping characteristics and performance of the suspension.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Heider et al. (USPN 4,923,210), Read (USPN 2,753,007), Levassuer (USPN 4,125,276), Hedenberg (USPN 4,518,171), Ferris et al. (USPN 5,380,028), Tandy Jr. et al. (USPN 5,636,857), Borns et al. (USPN 3,850,445), Dudding (USPN 6,129,369), GB 2187149A, JP8-295113.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (703)

305-6495. The examiner can normally be reached on Monday to Friday 6:00-3:30 except alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

PAUL N. DICKSON SUPERVISORY PATENT EXAMINER Page 8

TECHNOLOGY CENTER 3600